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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/821,375

04/08/2004

Kyung Ku Kim

2080-3244

1606

35884

7590

04/01/2008

LEE, HONG, DEGERMAN, KANG & SCHMADEKA

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EXAMINER

FINEMAN, LEE A

ART UNIT

PAPER NUMBER

2872

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/821,375

**Applicant(s)**

KIM, KYUNG KU

**Examiner**

LEE FINEMAN

**Art Unit**

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2008 and 06 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-6,8 and 16-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8 and 16-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6 February 2008 has been entered in which claims 1, 5 and 8 were amended and claims 24-33 were cancelled. Claims 1, 3-6, 8 and 16-23 are pending.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-6, 8 and 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimamura et al., US 6,808,773 (henceforth Shimamura) in view of Watanabe, WO 03/040782 A1 and Kamiya et al., WO 02/066570 A1 (henceforth Kamiya). **Note:** US 2004/0076835 A1 (Watanabe) and US 2004/0076768 A1 (Kamiya et al.) are the English equivalents of the prior art and will be referred to in the rejection.

Regarding claims 1, 3 and 4, Shimamura discloses in fig. 5 a front filter of a plasma display panel, the front filter comprising: a frame adhesive (12c and 22) located between an

antireflection layer (20a) and an electromagnetic shielding layer (14, 16a) of the front filter, having a transparent adhesive (12c) formed at an active display area of the plasma display panel and a black frame (22) formed at a nonactive display area surrounding the active display area (fig. 5); wherein the black frame (22) defines a region within which the transparent adhesive is located (fig. 5), wherein the region defined by the black adhesive corresponds to an active display area of the plasma display panel (fig. 5). Shimamura discloses the claimed invention except for wherein the black frame is a black adhesive; wherein the transparent adhesive and the black adhesive do not overlap; wherein the black adhesive is being formed by mixing the transparent adhesive with a black material; and wherein the black adhesive is 0.05 ~50% black material. Watanabe teaches a display with a front filter (see fig. 6) wherein the frame adhesive (33 and 34) includes a black frame (33) and a transparent adhesive (34) formed at an active display area of the display panel (page 7, section [0071], line 5); and wherein the transparent adhesive and the black frame do not overlap (fig. 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made configure the frame adhesive of Shimamura as taught by Watanabe to provide a more compact system. Kamiya et al. further teaches in figs. 4 and 5 using a black adhesive frame (12b) in a display panel wherein the black frame is also a black adhesive and wherein the black adhesive is being formed by mixing the transparent adhesive with a black material (page 1, section [0019]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the black frame portion of Shimamura with the black adhesive frame of Kamiya to provide an effective screen frame while also providing better adhesion between layers (Kamiya et al., page 2, section [0021], lines 8-12). Further, regarding claim 4, it would have been obvious to one having ordinary skill

in the art at the time the invention was made to make the black material 0.05 ~50% of the mixture, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering an optimum value or working ranges involves only routine skill in the art. One would have been motivated to make the black material 0.05 ~50% of the mixture for the purpose of supplying the correct opacity to the frame. *In re Aller*, 220 F.2d 454, 456 105 USPQ 233, 235.

Regarding claims 5-6 and 16-20, Shimamura in view of Watanabe and Kamiya as set forth above further disclose wherein the front filter is attached to an upper glass substrate of a plasma display panel (not shown, column 1, lines 34-35); has a near infrared shielding layer (18), and comprises a plurality of adhesives (12c-f) formed between the near infrared shielding layer (18), the electromagnetic shielding layer (14, 16a) and the antireflection layer (20a), wherein the black frame adhesive defines an active display area of the plasma display panel (see fig. 5 of Shimamura); wherein the frame adhesive is formed on the electromagnetic shielding layer (see fig. 5 of Shimamura); wherein a transparent adhesive (12c) is formed at an area that is overlapped with the active display area (fig. 5); and a base film (10).

Regarding claim 8, Shimamura further discloses a fabrication method of a front filter of a plasma display panel comprising: preparing a base film (10); forming a black frame (22) at a nonactive display area of the plasma display panel (fig. 5), wherein the nonactive display area is positioned on the base film (fig. 5); and forming a transparent adhesive (12c) at an active display area of the plasma display panel, wherein the active display area is positioned on the base film (fig. 5), and wherein the black frame and the transparent adhesive are located between an antireflection layer (20a) and an electromagnetic shielding layer (14, 16a) of the front filter (fig.

5); and wherein the black frame (22) defines a region within which the transparent adhesive is located (fig. 5), wherein the region defined by the black adhesive corresponds to an active display area of the plasma display panel (fig. 5). Shimamura discloses the claimed invention except for wherein the black frame is a black adhesive and wherein the transparent adhesive and the black adhesive do not overlap (fig. 6). Watanabe teaches a display with a front filter (see fig. 6) wherein the frame adhesive (33 and 34) includes a black frame (33) and a transparent adhesive (34) formed at an active display area of the display panel (page 7, section [0071], line 5); and wherein the transparent adhesive and the black frame do not overlap (fig. 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made configure the frame adhesive of Shimamura as taught by Watanabe to provide a more compact system. Kamiya et al. further teaches in figs. 4 and 5 using a black adhesive frame (12<sub>B</sub>) in a display panel wherein the black frame is also a black adhesive (page 1, section [0019]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the black frame portion of Shimamura with the black adhesive frame of Kamiya to provide an effective screen frame while also providing better adhesion between layers (Kamiya et al., page 2, section [0021], lines 8-12).

Regarding claim 21, Shimamura further disclose wherein the nonactive display area is positioned on an outer area of the active display area (fig. 5).

Regarding claim 22, Shimamura in view of Watanabe and Kamiya further disclose wherein the black adhesives are formed by one of a printing method, a laminating method and a pressing method (pressing method, page 2, section [0021] of Kamiya).

Regarding claim 23, Shimamura further disclose wherein the transparent adhesives are formed by one of a printing method, a laminating method and a pressing method (column 6, lines 60-65).

#### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1, 3-6, 8 and 16-23 have been considered but are moot in view of the new ground(s) of rejection.
5. It is noted by the Examiner that the objections to the specification made in the previous Office Action have been withdrawn due to amendment by the Applicant.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEE FINEMAN whose telephone number is (571)272-2313. The examiner can normally be reached on Monday - Friday 8:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2872

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lee Fineman/  
Patent Examiner, Art Unit 2872  
27 March 2008